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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,181	04/26/2001	Yoshiyuki Mochizuki	2001_0501A	7249
513	7590	02/25/2004	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			SHERR, CRISTINA O	
			ART UNIT	PAPER NUMBER
			3621	

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/842,181

Applicant(s)

MOCHIZUKI, YOSHIYUKI

Examiner

Cristina O Sherr

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This correspondence is in response to the Application filed 26 April 2001. Claims 1-16 have been examined in this case.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 26 November 2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.
3. According to the face of the Application file, Applicant may have submitted an additional IDS form on 26 April 2001. Currently, no such IDS form appears in the file. Applicant is requested to verify the enclosed signed IDS forms and resubmit an IDS form corresponding to any references not listed as considered by the Examiner. The Office regrets any inconvenience caused to Applicant.

Specification

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fultz (US 6,021,371A) in view of Behr et al (US 5,543,789A).

7. Regarding claim 1 –

Fultz discloses an interactive navigation system that comprises a mobile apparatus and a server and carries out navigation by said mobile apparatus requesting said server to search for a route and said server transmitting a search result to said mobile apparatus, said mobile apparatus comprising: input means for inputting at least a destination; and first transmitter means for transmitting a packet including at least the destination inputted by said input means to said server, said server comprising: map data storage means for storing map data; first receiver means for receiving the packet transmitted by said first transmitter means; route search means for searching for the route based on the destination included in the packet received by said first receiver means and the map data stored in said map data storage means; map data selector means for selecting, from among the map data stored in said map data storage means, only map data including the route found by said route search means; billing means that holds a price list including unit prices for the map data stored in said map data storage means, for calculating an amount of charge for the map data selected by said map data selector means based on the price list, and generating billing information including at least the amount of charge; and second transmitter means for transmitting, to said mobile apparatus, a packet including at least the route found by said route search means, the map data selected by said map data selector means, and the billing information generated by said billing means (Col 3 ln 32 - col 4 ln 52).

8. Regarding claim 2 –

Fultz discloses the interactive navigation system according to claim 1, wherein said mobile apparatus further comprises: second receiver means for receiving the packet transmitted by said second transmitter means; and route guide means for carrying out route guide based on the route included in the packet received by said second receiver means and the map data (col 5 ln 35-54).

9. Regarding claim 3 –

Fultz discloses the interactive navigation system according to claim 1, wherein said mobile apparatus further comprises present position detector means for detecting a present position of the mobile apparatus, the packet transmitted by said first transmitter means further includes the present position detected by said present position detector means, and based on the present position and the destination included in the packet received by said first receiver means and the map data stored in said map data storage means, said route search means searches for the route from the present position and the destination (col 6 ln 7-26).

10. Regarding claim 4 –

Fultz discloses the interactive navigation system according to claim 1, wherein a starting point is inputted by said input means, the packet transmitted by said first transmitter means includes the starting point inputted by said input means, and based on the starting point and the destination included in the packet received by said first receiver means and the map data stored in said map data storage means, said route search means searches for the route from the starting point and the destination (col 6 ln 25-44).

11. Regarding claim 5 –

Fultz discloses the interactive navigation system according to claim 1, wherein said server further comprises related information storage means for storing related information relating to the map data stored in said map data storage means, the price list held by said billing means includes a unit price for the related information stored in said related information storage means, said billing means calculates an amount of charge for related information relating to the map data selected by said map data selector means, and adds the calculated amount of charge to said billing information, and the packet transmitted by said second transmitter means further includes the related information relating to the map data selected by said map data selector means (col 7 ln 1-24).

12. Regarding claim 6 –

Behr discloses an interactive navigation system, wherein said mobile apparatus further comprises presenter means for presenting the related information included in the packet received by said second receiver means (col 3 20-43).

13. Regarding claim 7 –

Behr discloses an interactive navigation system, wherein the related information includes traffic jam information for roads in an area that corresponds to the map data, and said billing means calculates an amount of charge for the traffic jam information as the amount of charge for related information relating to the map data selected by said map data selector means (col 4 ln 5-19).

14. Regarding claim 8 –

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Behr discloses an interactive navigation system, wherein a registration identifier is further inputted by said input means, the packet transmitted by said first transmitter means further includes the registration identifier inputted by said input means, said server further comprises registration check means that holds a registration check list including at least all valid registration identifiers, for determining whether the registration identifier included in the packet received by said first receiver means is in the registration check list, and said route search means carries out the route search only when said registration check means determines that the registration identifier is in the registration check list (col 2 ln 50 – col 3 ln 50).

15. Regarding claim 9 –

Behr discloses an interactive navigation system, wherein said map data storage means stores a plurality of map data of different forms for use in displaying a same map, a registered data form is further inputted by said input means, the packet transmitted by said first transmitter means further includes the registered data form inputted by said input means, the registration check list held by said registration check means includes the registered data form that corresponds to a registered identifier, and said map data selector means selects, from among the map data stored in said map data storage means, only map data including the route found by said route search means and complying with a registered data form included in the packet received by said first receiver means (col 5 ln 5-19).

16. It would be obvious to one of ordinary skill in the art to combine the teachings of Fultz and Behr in order to obtain a more complete and more user-friendly navigation system.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claims 10-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Behr et al (US 5,543,789A).

19. Regarding claim 10 -

Behr discloses a server that searches for a route in response to a request from a mobile apparatus and transmits the route found by search to said mobile apparatus, said mobile apparatus comprising: input means for inputting at least a destination, and first transmitter means for transmitting a packet including at least the destination inputted by said input means to said server, said server comprising: map data storage means for storing map data; first receiver means for receiving the packet transmitted by said first transmitter means; route search means for searching for the route based on the destination included in the packet received by said first receiver means and the map data stored in said map data storage means; map data selector means for selecting, from among the map data stored in said map data storage means, only map data including the route found by said route search means; billing means that holds a price

list including unit prices for the map data stored in said map data storage means, for calculating an amount of charge for the map data selected by said map data selector means based on the price list, and generating billing information including at least the amount of charge; and second transmitter means for transmitting, to said mobile apparatus, a packet including at least the route found by said route search means, the map data selected by said map data selector means, and the billing information generated by said billing means (col 2 ln 50 – col 4 ln 43).

20. Regarding claim 11 –

Behr discloses an interactive navigation method of carrying out navigation by searching for a route in response to a request from a mobile apparatus and transmitting the route found to said mobile apparatus, said mobile apparatus comprising: input means for inputting at least a destination; and transmitter means for transmitting a packet including at least the destination inputted by said input means to said server, said method comprising: a step of storing map data; a step of receiving the packet transmitted by said transmitter means; a step of searching for the route based on the destination included in the packet received in said receiving step and the map data stored in said map data storing step; a step of selecting, from among the map data stored in said map data storing step, only map data including the route found in said route searching step; a billing step of calculating an amount of charge for the map data selected in said map data selecting step based on a price list including unit prices for the map data stored in said map data storing step, and generating billing information including at least the amount of charge; and a step of transmitting, to said mobile apparatus, a packet

including at least the route found in said route searching step, the map data selected in said map data selecting step, and the billing information generated in said billing step (col 4 ln 55 – col 5 ln 38).

21. Regarding claim 12 –

Behr discloses a program that describes an interactive navigation method of carrying out navigation by searching for a route in response to a request from a mobile apparatus and transmitting the route found to said mobile apparatus, said mobile apparatus comprising: input means for inputting at least a destination; and transmitter means for transmitting a packet including at least the destination inputted by said input means to said server, said method comprising: a step of storing map data; a step of receiving the packet transmitted by said transmitter means; a step of searching for the route based on the destination included in the packet received in said receiving step and the map data stored in said map data storing step; a step of selecting, from among the map data stored in said map data storing step, only map data including the route found in said route searching step; a billing step of calculating an amount of charge for the map data selected in said map data selecting step based on a price list including unit prices for the map data stored in said map data storing step, and generating billing information including at least the amount of charge; and a step of transmitting, to said mobile apparatus, a packet including at least the route found in said route searching step, the map data selected in said map data selecting step, and the billing information generated in said billing step (col 13 ln 27-45).

22. Regarding claim 13 –

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Behr discloses an interactive navigation system that comprises a plurality of mobile apparatuses and a server and carries out navigation by one of said mobile apparatuses requesting said server to search for a route and said server transmitting a search result to said mobile apparatus, each of said mobile apparatuses comprising: input means for inputting at least a destination; present position detector means for detecting a present position of the mobile apparatus; and first transmitter means for transmitting a packet including at least the destination inputted by said input means and/or the present position detected by said present position detector means to said server, said server comprising: map data storage means for storing map data; first receiver means for receiving the packet transmitted by said first transmitter means; route search means for searching for a route, if the packet received by said first receiver means includes the destination, based on the destination and the map data stored in said map data storage means; and second transmitter means for transmitting a packet including at least the route found by said route search means to said mobile apparatus, wherein said route search means holds a mobile apparatus position/route management table for recording and managing the present position of each of said mobile apparatuses and the route found for each of said mobile apparatuses, finds a plurality of reachable routes to the destination when the packet received by said first receiver means includes the destination, sequentially calculates, for each of the found reachable routes, a time when a target mobile apparatus will pass at predetermined speed along the route through each link composing the reachable route, calculates, for each link, a number of presumed passing apparatuses that indicates how many mobile apparatuses will pass

through the link simultaneously when the target mobile apparatus will pass through the link, based on the present position of the mobile apparatuses other than the target mobile apparatus and the route recorded in said mobile apparatus position/route management table, calculates a weight to be provided to each link based on the number of presumed passing apparatuses calculated for each link, and searches for the route based on a route graph with each link provided with at least the weight calculated based on the number of presumed passing apparatuses (col 2 ln 50 – col 4 ln 43).

23. Regarding claim 14 -

Behr discloses the interactive navigation system according to claim 13, wherein said server further comprises input/output means connected to a communication line network, and said route search means further externally receives traffic jam information through said input/output means and said communication line network, and calculates a weight to be provided to each link based on the traffic jam information, finds the plurality of reachable routes based on a route graph with each link provided with the weight calculated based on the traffic jam information, and searches for the route based on the weight calculated based on the traffic jam information and the weight calculated based on the number of presumed passing apparatuses (col 4 ln 5-19).

24. Regarding claim 15 –

Behr discloses an interactive navigation method of carrying out navigation by searching for a route in response to a request from one of a plurality of mobile apparatuses and transmitting the route found to said mobile apparatus, each of said mobile apparatuses comprising: input means for inputting at least a destination; present position detector

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means for detecting a present position of the mobile apparatus; and transmitter means for transmitting a packet including at least the destination inputted by said input means and/or the present position detected by said present position detector means to said server, a step of receiving the packet transmitted by said transmitter means; a step of searching for a route, when the packet received in said receiving step includes the destination, based on the destination and the map data stored in said map data storing step; and a step of transmitting a packet including at least the route found in said route searching step to said mobile apparatus, wherein in said route searching step, a mobile apparatus position/route management table is held for recording and managing the present position of each of said mobile apparatuses and the route found for each of said mobile apparatuses, and said route searching step further comprising: a step of finding a plurality of reachable routes to the destination if the packet received in said receiving step includes the destination; a step of sequentially calculating, for each of the found reachable routes, a time when a target mobile apparatus will pass at predetermined speed along the route through each link composing the reachable route; a step of calculating, for each link, a number of presumed passing apparatuses that indicates how many mobile apparatuses will pass through the link simultaneously when the target mobile apparatus will pass through the link, based on the present position of the mobile apparatuses other than the target mobile apparatus and the route recorded in said mobile apparatus position/route management table; a step of calculating a weight to be provided to each link based on the number of presumed passing apparatuses calculated for each link; and a step of searching for the route based on a route graph

with each link provided with at least the weight calculated based on the number of presumed passing apparatuses (col 2 ln 50 – col 4 ln 43).

25. Regarding claim 16 –

Behr discloses a program that describes an interactive navigation method of carrying out navigation by searching for a route in response to a request from one of a plurality of mobile apparatuses and transmitting the route found to said mobile apparatus, each of said mobile apparatuses comprising: input means for inputting at least a destination; present position detector means for detecting a present position of the mobile apparatus; and transmitter means for transmitting a packet including at least the destination inputted by said input means and/or the present position detected by said present position detector means to said server, a step of receiving the packet transmitted by said transmitter means; a step of searching for a route, when the packet received in said receiving step includes the destination, based on the destination and the map data stored in said map data storing step; and a step of transmitting a packet including at least the route found in said route searching step to said mobile apparatus, wherein in said route searching step, a mobile apparatus position/route management table is held for recording and managing the present position of each of said mobile apparatuses and the route found for each of said mobile apparatuses, and said route searching step further comprising: a step of finding a plurality of reachable routes to the destination if the packet received in said receiving step includes the destination; a step of sequentially calculating, for each of the found reachable routes, a time when a target mobile apparatus will pass at predetermined speed along the route through each link

composing the reachable route; a step of calculating, for each link, a number of presumed passing apparatuses that indicates how many mobile apparatuses will pass through the link simultaneously when the target mobile apparatus will pass through the link, based on the present position of the mobile apparatuses other than the target mobile apparatus and the route recorded in said mobile apparatus position/route management table; a step of calculating a weight to be provided to each link based on the number of presumed passing apparatuses calculated for each link; and a step of searching for the route based on a route graph with each link provided with at least the weight calculated based on the number of presumed passing apparatuses (col 2 ln 50 – col 4 ln 43).

26. Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the examiner.

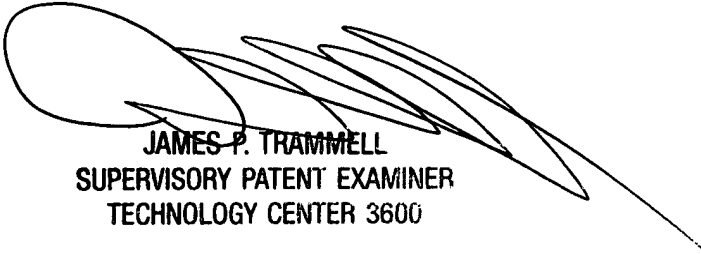
Conclusion

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cristina O Sherr whose telephone number is 703-305-0625. The examiner can normally be reached on Monday through Friday 8:30 to 5:00.

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28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 703-305-9768. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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